BERYL B. SIMPSON and MOLLY C. OGORZALY. **Economic Botany. Plants in our World, Third Edition.** 2001. (ISBN 0-07-290938-2, hbk.). McGraw-Hill Higher Education, McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020, U.S.A. (Orders: www.mhhe.com). $70.50, 544 pp, illustrated, 8 1/2" × 11".

The distinction between economic botany and ethnobotany is often blurry. For many people, economic botany is an inventory plants used for project x and ethnobotany is trudging through Amazonia in search of the cure to a modern disease. Neither of these perspectives is particularly accurate. While included in this text are a number of ethnobotanical examples, this book, as its title indicates, is devoted to economic botany. (And economic botany is inherently human-based and/or influenced.) This third edition of *Economic Botany* outlines the breadth of this discipline and its impact on our lives, past and present.

The book is made up of 19 chapters that have been significantly updated since the publication of the second edition. Chapters one and two from the first two editions have been condensed and rewritten into the third editions chapter one, "Plants and Their Manipulation by People." This chapter discusses plants, vegetative structures, reproductive structures, traditional methods of plant manipulation, variation and selection in flowering plants, the nature of plant species, the naming of plants, and determining the relationships among plants. Chapter two reviews current ideas on the adoption of agriculture, as well as the origins of particular crops.

The bulk of the book is made up of chapters three through 17 that focus on important angiosperm and gymnosperm crop species. The first five of these chapters group food plants by the parts of the plants (ie – fruits, leaves, stems) harvested for food. Chapters eight through 16 cover products that are primarily extracted from plant parts. Substances such as volatile oils, alkaloids, latexes, are grouped according to their use: spices and perfumes, textile fibers, and bioactive compounds. For each group of plant products discussed, the natural occurrences, chemistries, and functions within the plants in which they occur are outlined. Chapter three discusses fruits and nuts of temperate regions, focusing on apples and their relatives and other fruits. Chapter four covers fruits and nuts from warm regions, like citrus fruits, tomatoes, peppers and eggplants, to name a few. Cereal grains and forage grasses are covered in chapter five, which reviews the major grain crops and grass plants and forage grasses. Chapters six is devoted to legumes: pulses, tamarind, and carob. Chapter seven covers foods from leaves, stems, and roots and is one of the larger chapters in the book. Discussed in chapter seven are the structure and function of stems, leaves, and roots, biennial and annual crops, vegetables from bulbs, starchy root crops, and sweets from stems and roots.

Chapter eight covers the chemistry and ecology of spices, herbs, and perfumes. Chapter nine discusses the composition of seed oils like polyunsaturated, unsaturated, and moderately saturated oils and vegetable fats. Chapter 10 discusses hydrogels, elastic latexes, and resins. Chapter 11 focuses on medicinal plants, and in this edition include updated information on the most commonly used herbal remedies. The chapter covers the history of medicinal plants, the chemistry of plant derived medicines, and dietary supplements. Chapter 12 is devoted to psychoactive drugs and poisons and includes information about the chemistry and pharmacology of psychoactive drugs, and a history of drug use and abuse. Chapters 13 and 14 cover stimulating and alcoholic beverages. Chapter 15 covers fibers, dyes, and tannins, followed by chapter 16 covering wood, cork, and bamboo. Chapter 17 covers ornamental plants, specifically, nursery crops, florist crops, and houseplants. Chapter 18 on Algae is expanded from the previous editions to include new information on bioactive algae that produce newly discovered toxins and research on the medical potential of algal compounds. The final chapter discusses the uses of plants in the future and is also revised. The book closes with a list of additional readings, a glossary (new to this edition), and an index.

SIDA 19(3): 759. 2001

In this updated edition the authors have made an effort to make the book more accessible in several ways. First, the material has been condensed into 500 pages that appear in two-column format to save page space. Color photos have been excluded, but there exist a number of new photos that are up to date and more globally inclusive. Another new design feature are the boxes that highlight interesting case-study material about the plants included in different chapters. The concentration in this edition is on species of major economic importance in the Western world, rather than trying to be encyclopedic. The authors have attempted to give a balanced treatment of plants including aspects of history, morphology, chemistry, and modern usage. At first glance this is a very textbook-like edition, however there are no summaries or review questions at the end of each chapter, suggesting that the target audience for this edition are graduate students.

In summary, this updated and revised edition of Simpson and Ogorzaly's original *Economic Botany* is an excellent text that should be the foundation for graduate level economic botany classes. The updated material on medicinal plants, ethnobotany, genetics and biotechnology, and sustainability and conservation ethics make the book relevant and practical to students and instructors of economic botany. I would highly recommend this book to anyone wanting a thorough global view of economic botany for a class or personal use.—*Kevin D. Janni, Botanical Research Institute of Texas, Fort Worth, TX 76102-4060 U.S.A., kjanni@brit.org.*

SIDA 19(3): 760. 2001